

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-41. (Canceled)

42. (Currently amended) A method for determining whether a test colon cell

has an inflammatory bowel disease (IBD) phenotype, said method comprising:

(a) determining an expression level of each of the following **genes gene products** in said test colon cell:

(i) a macrophage inflammatory protein-2 β (GRO3) gene product (SEQ ID NO:7);

(ii) a neutrophil lipocalin (HNL) gene product (SEQ ID NO:14);

(iii) a macrophage elastase (MMP-12) gene product (SEQ ID NO:81);

(iv) an elastase specific inhibitor (elafin) gene product (SEQ ID NO:85); and

(v) a type VI collagen $\alpha 3$ chain (COL6A3) gene product (SEQ ID NO:87);

(b) comparing the expression level of each of said GRO3, HNL, MMP-12, elafin, and COL6A3 **genes gene products** in said test colon cell to an expression level of the same gene product in a normal colon cell; and

(c) associating an increase in the expression level of any of said GRO3, HNL, MMP-12, elafin, and COL6A3 **genes gene products** in said test colon cell relative to the expression level of the same gene product in said normal colon cell with an IBD phenotype in said test colon cell.

43-45. (Canceled)

46. (Currently amended) The method of claim 42, wherein said test colon cell

has an IBD phenotype when the expression level of any of said GRO3, HNL, MMP-12, elafin, and COL6A3 **genes gene products** in said test colon cell is increased relative to the expression level of the same gene product in said normal colon cell by at least a factor of two.

1 47. (Previously presented) The method of claim 42, wherein said test colon
2 cell is obtained from a needle biopsy core, a surgical resection sample, or a bowel sample.

1 48. (Currently amended) The method of claim 42, wherein the expression
2 level of said ~~genes~~ gene products is determined using Northern blot analysis, reverse
3 transcription-polymerase chain reaction, in situ hybridization, or an array.

1 49. (Currently amended) The method of claim 48, wherein said array
2 comprises:

3 (a) nucleic acid probes of 12-40 nucleotides in length, wherein said nucleic acid probes
4 are complementary to said ~~genes~~ gene products and hybridize under high stringency conditions
5 to said ~~genes~~ gene products; and

6 (b) a substrate to which said nucleic acid probes are bound.

1 50. (Previously presented) The method of claim 49, wherein said substrate is
2 selected from the group consisting of paper, membranes, filters, chips, pins, and glass.

1 51. (Previously presented) The method of claim 49, wherein said nucleic acid
2 probes are bound to said substrate by covalent bonds or hydrophobic interactions.

1 52. (Previously presented) The method of claim 49, wherein said nucleic acid
2 probes are spotted onto said substrate in a two-dimensional matrix or array.

1 53-56. (Canceled)